AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions and listings of claims in the application.

Listing of Claims

1-29. (Canceled)

30.   (Currently Amended) A service parameter interworking method in an interworking node, said method adapted to achieve a service parameter exchange between a circuit-switched network using a circuit-oriented protocol and a packet-switched network using a packet-oriented protocol, said method comprising:

receiving at the interworking node, circuit-switched service parameters from the circuit-switched network, wherein the circuit-switched service parameters define a level of precedence assigned to a call in the circuit-switched network by defining multi-level service information or bearer capability information, said multi-level service information being selected from (a) precedence information to assign a priority to a call, and (b) pre-emption information for a seizure of resources by a higher level precedence call in the absence of idle resources, wherein a call with a higher level of precedence may preempt a call with a lower level of precedence when there are insufficient network resources in the circuit-switched network for both calls;

mapping the circuit-switched service parameters into corresponding packet-switched service parameters, wherein the packet-switched service parameters define a level of precedence utilized for a data stream within the packet-switched network corresponding to the level of precedence assigned to the call in the circuit-switched network, wherein packets in a data stream with a higher level of precedence may be protected from being dropped when there is congestion in the packet-switched network; and

forwarding payload data across a network boundary between the circuit-switched network and the packet-switched network using a mapping result;

wherein the payload data is transported in the packet-switched network with a precedence level corresponding to the mapped precedence level from the circuit-switched network.

31-32. (Canceled)

33.   (Currently Amended) ~~The method according to claim 31,~~ A service parameter interworking method in an interworking node, said method adapted to achieve a service parameter exchange between a circuit-switched network using a circuit-oriented protocol and a packet-switched network using a packet-oriented protocol, said method comprising:

receiving at the interworking node, circuit-switched service parameters from the circuit-switched network, wherein the circuit-switched service parameters define a level of precedence assigned to a call in the circuit-switched network by defining multi-level service information or bearer capability information, wherein the multi-level service information includes Multi-Level Precedence and Preemption (MLPP) precedence levels utilized in circuit-switched networks, wherein a call with a higher level of precedence may preempt a call with a lower level of precedence when there are insufficient network resources in the circuit-switched network for both calls;

mapping the circuit-switched service parameters into corresponding packet-switched service parameters, wherein the packet-switched service parameters define a level of precedence utilized for a data stream within the packet-switched network corresponding to the level of precedence assigned to the call in the circuit-switched network, wherein packets in a data stream with a higher level of precedence may be protected from being dropped when there is congestion in the packet-switched network; and

forwarding payload data across a network boundary between the circuit-switched network and the packet-switched network using a mapping result;

wherein the payload data is transported in the packet-switched network with a precedence level corresponding to the mapped precedence level from the circuit-switched network.

34.   (Currently Amended) ~~The method according to claim 31,~~ A service parameter interworking method in an interworking node, said method adapted to achieve a service parameter exchange between a circuit-switched network using a circuit-oriented protocol and a packet-switched network using a packet-oriented protocol, said method comprising:

receiving at the interworking node, circuit-switched service parameters from the circuit-switched network, wherein the circuit-switched service parameters define a level of precedence assigned to a call in the circuit-switched network by defining multi-level service information or bearer capability information, wherein the multi-level service information includes enhanced Multi-Level Precedence and Preemption (eMLPP) precedence levels utilized in GSM networks, wherein a call with a higher level of precedence may preempt a call with a lower level of precedence when there are insufficient network resources in the circuit-switched network for both calls;

mapping the circuit-switched service parameters into corresponding packet-switched service parameters, wherein the packet-switched service parameters define a level of precedence utilized for a data stream within the packet-switched network corresponding to the level of precedence assigned to the call in the circuit-switched network, wherein packets in a data stream with a higher level of precedence may be protected from being dropped when there is congestion in the packet-switched network; and

forwarding payload data across a network boundary between the circuit-switched network and the packet-switched network using a mapping result;

wherein the payload data is transported in the packet-switched network with a precedence level corresponding to the mapped precedence level from the circuit-switched network.

35.   (Previously Presented) The method according to claim 30, wherein the packet-switched service parameters define a requested level of service in the packet-switched network through bit settings in a service differentiation field (DS) of data packets, wherein the DS field is a Type of Service field according to IPv4.

36.   (Previously Presented) The method according to claim 30, wherein the packet-switched service parameters define a requested level of service in the packet-switched network through bit settings in a service differentiation field (DS) of data packets, wherein the DS field is a Traffic Class Octet field according to IPv6.

37.   (Currently Amended) A service parameter interworking method in an interworking node, said method adapted to achieve a service parameter exchange between a packet-switched network using a packet-oriented protocol and a circuit-switched network using a circuit-oriented protocol, said method comprising:

receiving at the interworking node, packet-switched service parameters from the packet-switched network, wherein the packet-switched service parameters define a level of precedence assigned to a data stream within the packet-switched network, wherein packets in a data stream with a higher level of precedence may be protected from being dropped when there is congestion in the packet-switched network;

mapping the packet-switched service parameters into corresponding circuit-switched service parameters, wherein the circuit-switched service parameters define a level of precedence utilized for a call in the circuit-switched network corresponding to the level of precedence assigned to the data stream in the packet-switched network, wherein the circuit-switched service parameters define multi-level service information or bearer capability information, said multi-level service information being selected from (a) precedence information to assign a priority to a call, and (b) pre-emption information for a seizure of resources by a higher level precedence call in the absence of idle resources, wherein a call with a higher level of precedence may preempt a call with a lower level of precedence when there are insufficient network resources in the circuit-switched network for both calls; and

forwarding payload data across a network boundary between the packet-switched network and the circuit-switched network using a mapping result;

wherein the payload data is transported in the circuit-switched network with a precedence level corresponding to the mapped precedence level from the packet-switched network.

38.   (Currently Amended) ~~A service parameter interworking method in an interworking node, said method adapted to achieve a service parameter exchange between a circuit-switched network using a circuit-oriented protocol and a packet-switched network using a packet-oriented protocol, said method comprising:~~

~~receiving at the interworking node, circuit-switched service parameters from the circuit-switched network, wherein the circuit-switched service parameters define a level of precedence assigned to a call in the circuit-switched network, wherein a call with a higher level of precedence may preempt a call with a lower level of precedence when there are insufficient network resources in the circuit-switched network for both calls;~~

~~mapping the circuit-switched service parameters into corresponding packet-switched service parameters,~~ The method according to claim 30, wherein packets in a data stream with a corresponding higher level of precedence are provided with Multiple Protocol Label Switching ~~(MLPS)~~ (MPLS) protocol labels utilized in packet headers to define a label-switched path for a data stream within the packet-switched network; ~~and~~

~~forwarding payload data across a network boundary between the circuit-switched network and the packet-switched network using a mapping result;~~

wherein the payload data is transported in the packet-switched network utilizing a label-switched path when the corresponding precedence level in the circuit-switched network is high.

39.   (Currently Amended) ~~A service parameter interworking method in an interworking node, said method adapted to achieve a service parameter exchange between a packet-switched network using a packet-oriented protocol and a circuit-switched network using a circuit-oriented protocol, said method comprising:~~

~~receiving at the interworking node, packet-switched service parameters from the packet-switched network,~~ The method according to claim 37, wherein packets in a data stream with a higher level of precedence are provided with Multiple Protocol Label Switching ~~(MLPS)~~ (MPLS) protocol labels utilized in packet headers to define a label-switched path for a data stream within the packet-switched network;

wherein the payload data is transported in the circuit-switched network with a high precedence level when the payload data is transported in the packet-switched network utilizing a label-switched path.

~~mapping the packet-switched service parameters into corresponding circuit-switched service parameters, wherein the circuit-switched service parameters define a corresponding level of precedence assigned to a call in the circuit switched network, wherein a call with a higher level of precedence may preempt a call with a lower level of precedence when there are insufficient network resources in the circuit-switched network for both calls; and~~

~~forwarding payload data across a network boundary between the circuit-switched network and the packet-switched network using a mapping result;~~

~~wherein the payload data is transported in the packet-switched network utilizing a label-switched path when the corresponding precedence level in the circuit-switched network is high.~~

40.   (Currently Amended) ~~A service parameter interworking method in an interworking node, said method adapted to achieve a service parameter exchange between a circuit-switched network using a circuit-oriented protocol and a packet-switched network using a packet-oriented protocol, said method comprising:~~

~~receiving at the interworking node, circuit-switched service parameters from the circuit-switched network, wherein the circuit-switched service parameters define a level of precedence assigned to a call in the circuit switched network, wherein a call with a higher level of precedence may preempt a call with a lower level of precedence when there are insufficient network resources in the circuit-switched network for both calls;~~

~~mapping the circuit-switched service parameters into corresponding packet-switched service parameters,~~ The method according to claim 30, wherein a resource reservation protocol (RSVP) is utilized in the packet-switched network to reserve bandwidth for a high priority data stream mapped from a corresponding high precedence call in the circuit-switched network~~; and~~

~~forwarding payload data across a network boundary between the circuit-switched network and the packet-switched network using a mapping result;~~

~~wherein the payload data is transported in the packet-switched network utilizing a label switched path when the corresponding precedence level in the circuit-switched network is high~~.

41. (Currently Amended) ~~A service parameter interworking method in an interworking node, said method adapted to achieve a service parameter exchange between a packet-switched network using a packet-oriented protocol and a circuit-switched network using a circuit-oriented protocol, said method comprising:~~

~~receiving at the interworking node, packet-switched service parameters from the packet-switched network, said packet-switched service parameters being associated with a high priority data stream for which~~ The method according to claim 37, wherein a resource reservation protocol (RSVP) is utilized to reserve bandwidth in the packet-switched network for a high priority data stream:

wherein the payload data is transported in the circuit-switched network with a high precedence level when the RSVP is utilized to reserve bandwidth in the packet-switched network for a high priority data stream.

~~mapping the packet-switched service parameters into corresponding circuit-switched service parameters, wherein the circuit-switched service parameters define a level of precedence assigned to a call in the circuit-switched network, wherein a call with a corresponding higher level of precedence may preempt a call with a lower level of precedence when there are insufficient network resources in the circuit-switched network for both calls; and~~

~~forwarding payload data across a network boundary between the circuit-switched network and the packet-switched network using a mapping result;~~

~~wherein the payload data is transported in the packet-switched network utilizing a label-switched path when the corresponding precedence level in the circuit switched network is high~~.

42.   (Currently Amended) An interworking node adapted to achieve a service parameter exchange between a circuit-switched network using a circuit-oriented protocol and a packet-switched network using a packet-oriented protocol, said interworking node comprising:

means for receiving circuit-switched service parameters from the circuit-switched network, wherein the circuit-switched service parameters define a level of precedence assigned to a call in the circuit-switched network by defining multi-level service information or bearer capability information, said multi-level service information being selected from (a) precedence information to assign a priority to a call, and (b) pre-emption information for a seizure of resources by a higher level precedence call in the absence of idle resources, wherein a call with a higher level of precedence may preempt a call with a lower level of precedence when there are insufficient network resources in the circuit-switched network for both calls;

means for mapping the circuit-switched service parameters into corresponding packet-switched service parameters, wherein the packet-switched service parameters define a level of precedence utilized for a data stream within the packet-switched network corresponding to the level of precedence assigned to the call in the circuit-switched network, wherein packets in a data stream with a higher level of precedence may be protected from being dropped when there is congestion in the packet-switched network; and

means for forwarding payload data across a network boundary between the circuit-switched network and the packet-switched network using a mapping result;

wherein the payload data is transported in the packet-switched network with a precedence level corresponding to the mapped precedence level from the circuit-switched network.

43.   (Currently Amended) An interworking node adapted to achieve a service parameter exchange between a packet-switched network using a packet-oriented protocol and a circuit-switched network using a circuit-oriented protocol, said interworking node comprising:

means for receiving at the interworking node, packet-switched service parameters from the packet-switched network, wherein the packet-switched service parameters define a level of precedence assigned to a data stream within the packet-switched network, wherein packets in a data stream with a higher level of precedence may be protected from being dropped when there is congestion in the packet-switched network;

means for mapping the packet-switched service parameters into corresponding circuit-switched service parameters, wherein the circuit-switched service parameters define a level of precedence utilized for a call in the circuit-switched network corresponding to the level of precedence assigned to the data stream in the packet-switched network, wherein the circuit-switched service parameters define multi-level service information or bearer capability information, said multi-level service information being selected from (a) precedence information to assign a priority to a call, and (b) pre-emption information for a seizure of resources by a higher level precedence call in the absence of idle resources, wherein a call with a higher level of precedence may preempt a call with a lower level of precedence when there are insufficient network resources in the circuit-switched network for both calls; and

means for forwarding payload data across a network boundary between the packet-switched network and the circuit-switched network using a mapping result;

wherein the payload data is transported in the circuit-switched network with a precedence level corresponding to the mapped precedence level from the packet-switched network.